

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/699,224	RICE ET AL.
	Examiner S. Devi, Ph.D.	Art Unit 1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to Applicants' after-final amendment filed 09/13/06.
- The allowed claim(s) ~~is/are~~ 1, 3-10, 12, 13, 15, 16 and 24-31, now renumbered as claims 1, 2-9, 10, 11, 12, 13 and 14-21 respectively.

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- Notice of References Cited (PTO-892)
- Notice of Draftsperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- Notice of Informal Patent Application
- Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
- Examiner's Amendment/Comment
- Examiner's Statement of Reasons for Allowance
- Other \_\_\_\_\_.

## ATTACHMENT TO NOTICE OF ALLOWABILITY

### Applicants' After-Final Amendment

1) Acknowledgment is made of Applicants' second after-final amendment filed 09/13/06 in response to the final Office Action mailed 12/29/05.

### Examiner's Amendment

2) An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicants, an amendment may be filed as provided by 37 C.F.R 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. The authorization to prepare this Examiner's amendment was provided by Mr. Jesse Becker in a telephonic interview on 14 September 2006.

This application has been amended as indicated below:

Claims 10, 12, 13, 15, 16, 24, 25, 27, 28, 29 and 30 have been amended as indicated below:

--Claim 10 (Currently amended). The peptide mimic according to claim 1, wherein said peptide mimic competes with gonococcal lipooligosaccharide (LOS) for binding to monoclonal antibody 2C7 produced by a hybridoma cell line having the ATCC accession number HB-11859.--

--Claim 12 (Currently amended). The peptide mimic according to claim 1, wherein the peptide mimic immunospecifically binds to monoclonal antibody 2C7 produced by a hybridoma cell line having the ATCC accession number HB-11859.--

--Claim 13 (Currently amended). The peptide mimic according to claim 1, wherein the peptide mimic immunospecifically binds to a monoclonal antibody produced by immunizing a mammal with an anti-idiotypic monoclonal antibody, or fragment thereof, produced by a hybridoma cell line having the specific immunological reactivity of a wherein said anti-idiotypic monoclonal antibody is produced by hybridoma cell line having the ATCC accession number HB-11211 as deposited with the ATCC.--

--Claim 15 (Currently amended). A composition for immunizing against *N. gonorrhoeae* infection comprising an immunoprophylactically effective amount of [[a]] the peptide mimic according to any one of claims 1, 3, 5-7, 12 and 13.--

--Claim 16 (Currently amended). A composition for immunizing against *N. gonorrhoeae* infection comprising an immunoprophylactically effective amount of [[a]] an isolated peptide mimic comprising the amino acid sequence of SEQ ID NO: 1.--

--Claim 24 (Currently amended and rejoined). A method ~~for~~ of immunizing a mammal against *N. gonorrhoeae* infection comprising ~~the step of~~ administering to said mammal an immunoprophylactically effective amount of [[a]] the peptide mimic according to claim 1 or claim 3 and pharmaceutically acceptable carrier.--

--Claim 25 (Currently amended and rejoined). A method ~~for~~ of immunizing a mammal against *N. gonorrhoeae* infection comprising ~~the step of~~ administering to said mammal an immunoprophylactically effective amount of [[a]] the peptide mimic according to claim 12 or claim 13 and a pharmaceutically acceptable carrier.--

--Claim 27 (Currently amended and rejoined). The peptide mimic according to claim 26, wherein the peptide mimic is coupled to complement protein is C3d.--

--Claim 28 (Currently amended and rejoined). A method ~~for~~ of immunizing a mammal against *N. gonorrhoeae* infection comprising ~~the step of~~ administering to said mammal an immunoprophylactically effective amount of [[a]] the peptide mimic according to claim 27 and a pharmaceutically acceptable carrier.--

--Claim 29 (Currently amended and rejoined). A composition for immunizing against *N. gonorrhoeae* infection comprising an immunoprophylactically effective amount of [[a]] the peptide mimic according to claim 27.--

--Claim 30 (Currently amended and rejoined). A method for increasing the antigenicity of [[a]] the peptide mimic according to claim 1 comprising ~~the step of~~ coupling said peptide mimic to a complement protein.--

### **Rejoinder**

3) Pursuant to the procedures set forth in the *Official Gazette Notice* dated March 26, 1996 (1184 O.G. 86), a claim directed to a process of using the patentable product(s), previously withdrawn from consideration as a result of restriction requirement, is now subject to being rejoined. The withdrawn claims 24-31 are hereby rejoined and fully examined for patentability under 37 C.F.R.

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1.104.

### **Status of Claims**

**4)** Claims 2 and 17-23 have been canceled via the amendment filed 09/13/06.

Claims 1, 4, 8-10, 13, 15, 16, 24-26 and 30 have been amended via the amendment filed 09/13/06.

Claims 10, 12, 13, 15, 24, 25 and 27-30 have been amended via this Examiner's amendment.

Claims 24-31, previously withdrawn as being directed to non-elected inventions, are hereby rejoined and fully examined.

Claims 1, 3-10, 12, 13, 15, 16 and 24-31 are pending and are under examination.

### **Objection(s) Withdrawn**

**5)** The objection to the drawings made in paragraph 6 of the Office Action mailed 02/26/03 and maintained in paragraph 6 of the Office Action mailed 01/28/05 and maintained in paragraph 5 of the Office Action mailed 12/29/05 under 37 C.F.R. 1.84 is withdrawn in light of Applicants' submission of replacement drawings filed 09/13/06.

### **Rejection(s) Moot**

**6)** The rejection of claim 2 made in paragraph 20 of the Office Action mailed 12/29/05 under 35 U.S.C. § 102(b) as being anticipated by Kufer *et al.* (WO 98/46645 A2, already of record), is moot in light of Applicants' cancellation of the claim.

### **Rejection(s) Withdrawn**

**7)** The rejection of claim 13 and those dependent therefrom made in paragraph 18 of the Office Action mailed 12/29/05 under 35 U.S.C. § 35 U.S.C. § 112, first paragraph, as containing new subject matter, is withdrawn in light of Applicants' amendment to claim 13.

**8)** The rejection of claim 13 made in paragraph 19(a) of the Office Action mailed 12/29/05 under 35 U.S.C. § 112, second paragraph, as being indefinite, is withdrawn in light of Applicants' amendment to the claim.

**9)** The rejection of claim 15 made in paragraph 19(b) of the Office Action mailed 12/29/05 under 35 U.S.C. § 112, second paragraph, as being indefinite, is withdrawn in light of Applicants'

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amendment to claim 13.

**10)** The rejection of claims 1, 3, 10, 12, 13 and 15 made in paragraph 20 of the Office Action mailed 12/29/05 under 35 U.S.C § 102(b) as being anticipated by Kufer *et al.* (WO 98/46645 A2, already of record), is withdrawn in light of Applicants' amendment to claims and/or the base claim.

**11)** The rejection of claims 4-9 made in paragraph 21 of the Office Action mailed 12/29/05 under 35 U.S.C § 103(a) as being unpatentable over Kufer *et al.* (WO 98/46645 A2, already of record) as applied to claim 1 above and further in view of Huang *et al.* (*Mol. Immunol.* 31: 1191-1199, 1994, already of record) and Tam (*In: Peptide Antigens: A Practical Approach.* (Ed) Wisdom G.B. IRL Press, Oxford University Press, New York, pp. 83-90, 1994, already of record), is withdrawn in light of Applicants' amendment to claims and/or the base claim.

### **Remarks**

**12)** Claims 1, 3-10, 12, 13, 15, 16 and 24-31 are allowed. Claims 3-10, 12, 13, 15, 16 and 24-31 are now renumbered as claims 2-9, 10, 11, 12, 13 and 14-21 respectively.

The limitations added to claims 10 and 12 have descriptive support on page 26 of the instant specification. The monoclonal antibodies produced by the two hybridoma cell lines having the ATCC accession numbers HB11311 and HB-11859 respectively, as described on page 26 of the instant specification, are art-known antibodies. These hybridoma cell lines were available in the art prior to the instant invention. See claims of US patents US 5,476,784 (of record), US 5,939,067 (of record), US 6,099,839 (of record), US 5,888,509 and US 6,074,641.

**13)** Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. The Fax number for submission of amendments, responses or papers is (571) 273-8300, which receives transmissions 24 hours a day and 7 days a week.

**14)** Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAG or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAA system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**15)** Any inquiry concerning this communication or earlier communications from the Examiner should be directed to S. Devi, MS, PhD, whose telephone number is (571) 272-0854. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 7.15 a.m. to 4.15 p.m. except one day each bi-week, which would be disclosed on the Examiner's voice mail system.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Acting Supervisor, Albert Navarro, can be reached on (571) 272-0861.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

September, 2006

  
S. DEVI, PH.D.  
PRIMARY EXAMINER